ABSTRACT OF THE INVENTION

A system and method for determining DTMF coefficients stores a plurality of reference templates, at least some of said reference templates representative of likelihood ratios. A plurality of LPC coefficients is received. The LPC coefficients are representative of an input signal. The system and method determines a plurality of current likelihood ratios based, at least in part, upon the LPC coefficients. The system and method also determines an initial tone based, at least in part, on the minimum of the current likelihood ratios and the minimum of the reference likelihood ratios. A plurality of LSF coefficients is received. The LSF coefficients are determined, at least in part, upon the input signal. The system and method verifies the validity of the initial tone based, at least in part, upon the LSF coefficients.